

JVC

SERVICE MANUAL

AV SELECTOR

MODEL No. **JX-S100 (EB)**



Contents

	Page		Page
1. Instruction Manual	1	8. Exploded View	14
2. Specifications	10	9. Parts List	14
3. Names of Parts and Their Functions	10	10. Packing Materials and Parts Numbers	15
4. Disassembly	11	11. Accessories List	15
5. Main Parts Locations	12	12. Schematic Diagram	Separate-volume Insertion
6. Operations	13	13. Printed Circuit Board	Separate-volume Insertion
7. Block Diagram	13		

1. Instruction Manual

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

- It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

FEATURES

- Four inputs two outputs (one included in INPUT-1) plus monitor output terminal for connection of Super VHS VCRs, high-resolution TV and other video components compatible with Super VHS VCRs.
- Allows switching of input signals from VCRs, Super VHS camcorders and any other AV source components, with simplified operation.
- Input terminals, including Super VHS compatible terminals, are provided on the front panel for the temporary connection of a video camera/camcorder.
- "Passive design" means no power supply is necessary, making it easy to handle and convenient to use.

IMPORTANT

1. Installation

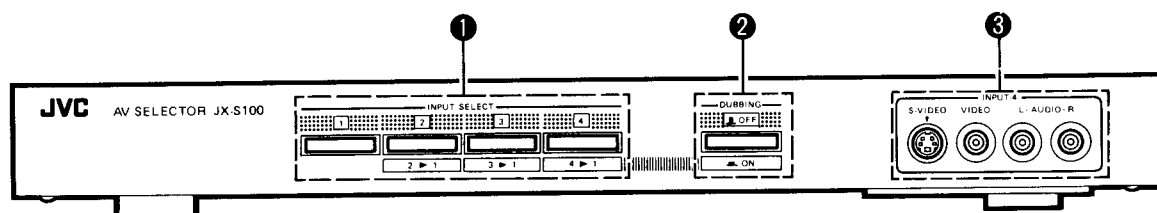
- Select a place which is level, dry and neither too hot nor too cold (between -5°C and $40^{\circ}\text{C}/23^{\circ}\text{F}$ and 104°F).
- Keep away from direct sunlight.
- Do not put it too close to a heater.

2. Malfunctions, etc.

- Do not insert any metallic object.
- Do not allow water to get inside.

DESCRIPTION AND FUNCTIONS

< Front Panel >



① INPUT SELECT buttons

Select the required input source with these buttons.

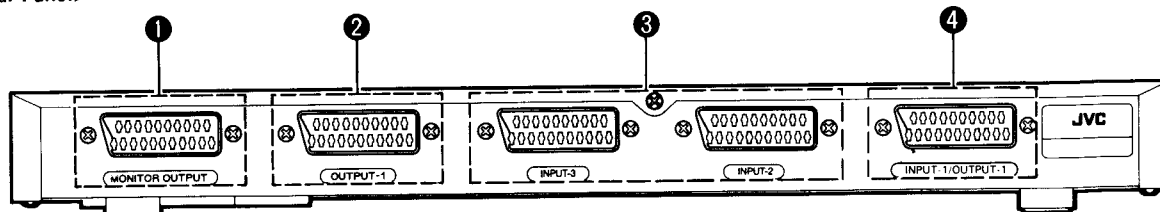
② DUBBING button

Press this button to engage the dubbing/editing mode. The signal flow in the dubbing/editing mode is indicated beneath each input select button.

③ INPUT-4 terminals

Connect the output terminals of a video/audio component to these terminals; these are convenient for the temporary hook-up of a camcorder or portable VCR.

< Rear Panel >



① MONITOR OUTPUT terminal

Connect the input terminals of the monitor TV to this terminal.

② OUTPUT-1 terminal

Connect the input terminals of video/audio components to this terminal.

③ INPUT-2/-3 terminals

Connect the output terminals of video/audio components to these terminals.

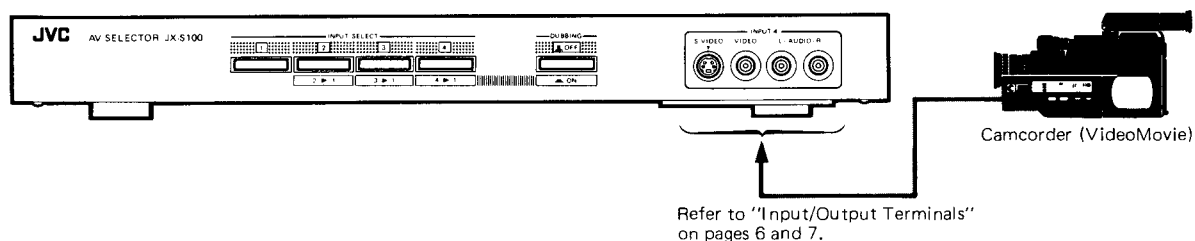
④ INPUT-1/OUTPUT-1 terminal

Connect the input/output terminals of video/audio components to this terminal.

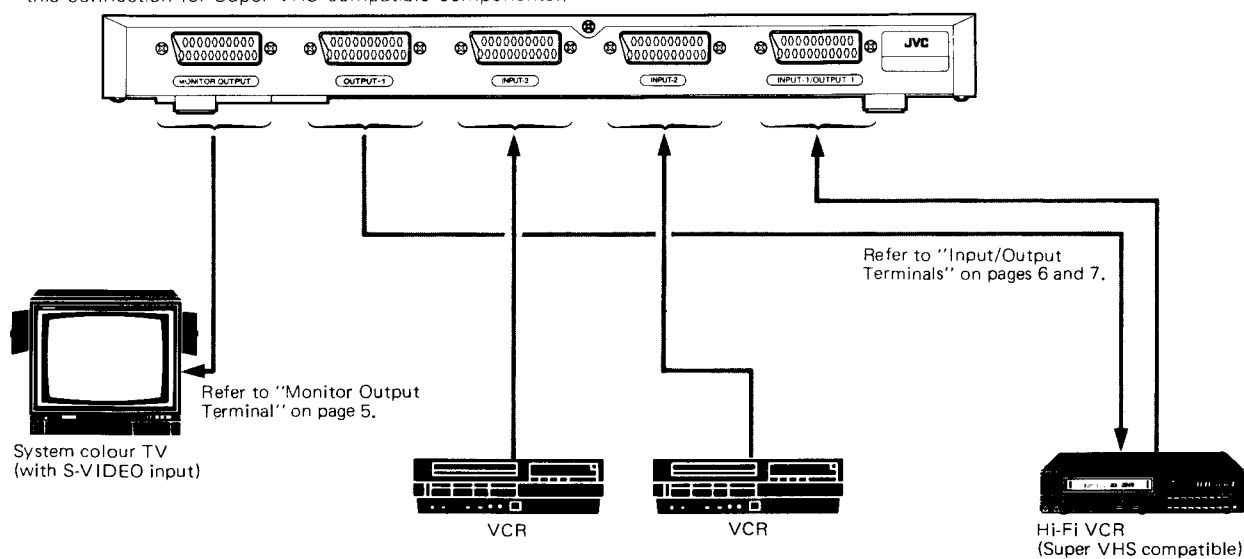
CONNECTIONS

- Be sure to turn off the power of all components before connecting.

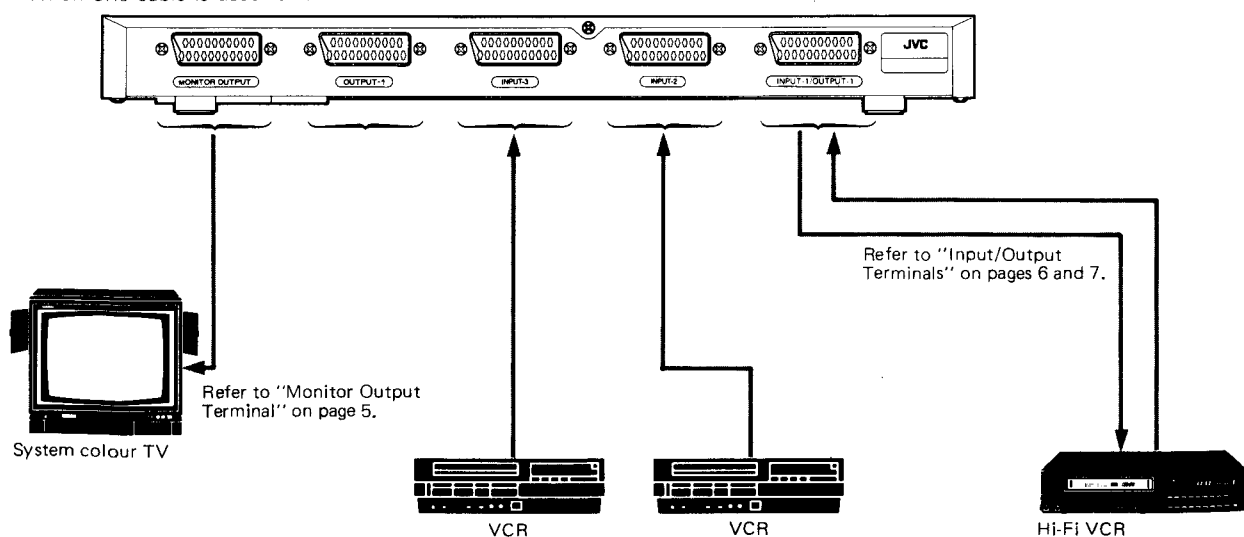
■ System connection example



- When two separate cables are used for connection of the INPUT-1/OUTPUT-1 terminal and OUTPUT-1 terminal of this unit to VCR. (Choose this connection for Super VHS compatible components.)

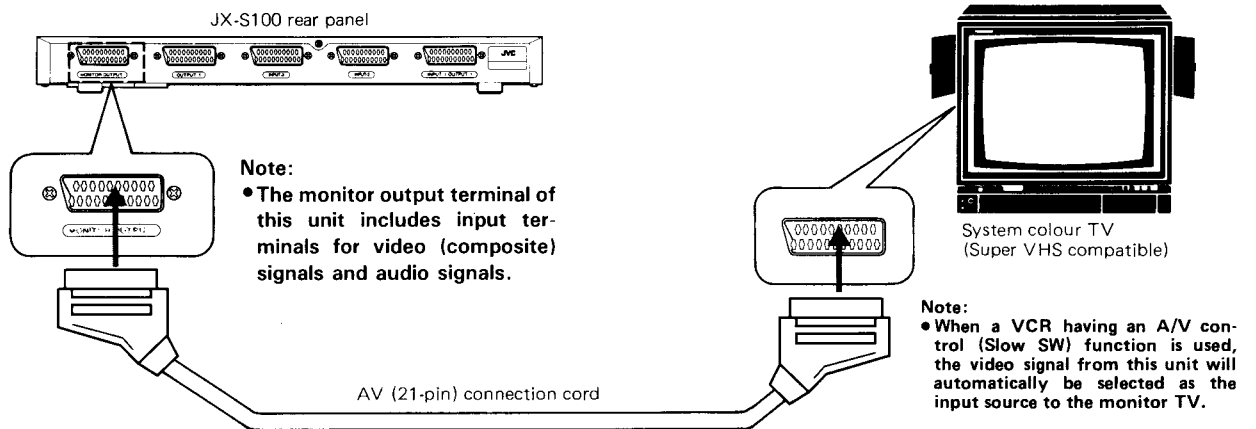


- When one cable is used for connection of the INPUT-1/OUTPUT-1 terminal of this unit to VCR.



MONITOR OUTPUT Terminal

•Connection of TV monitor with AV (21-pin) terminal

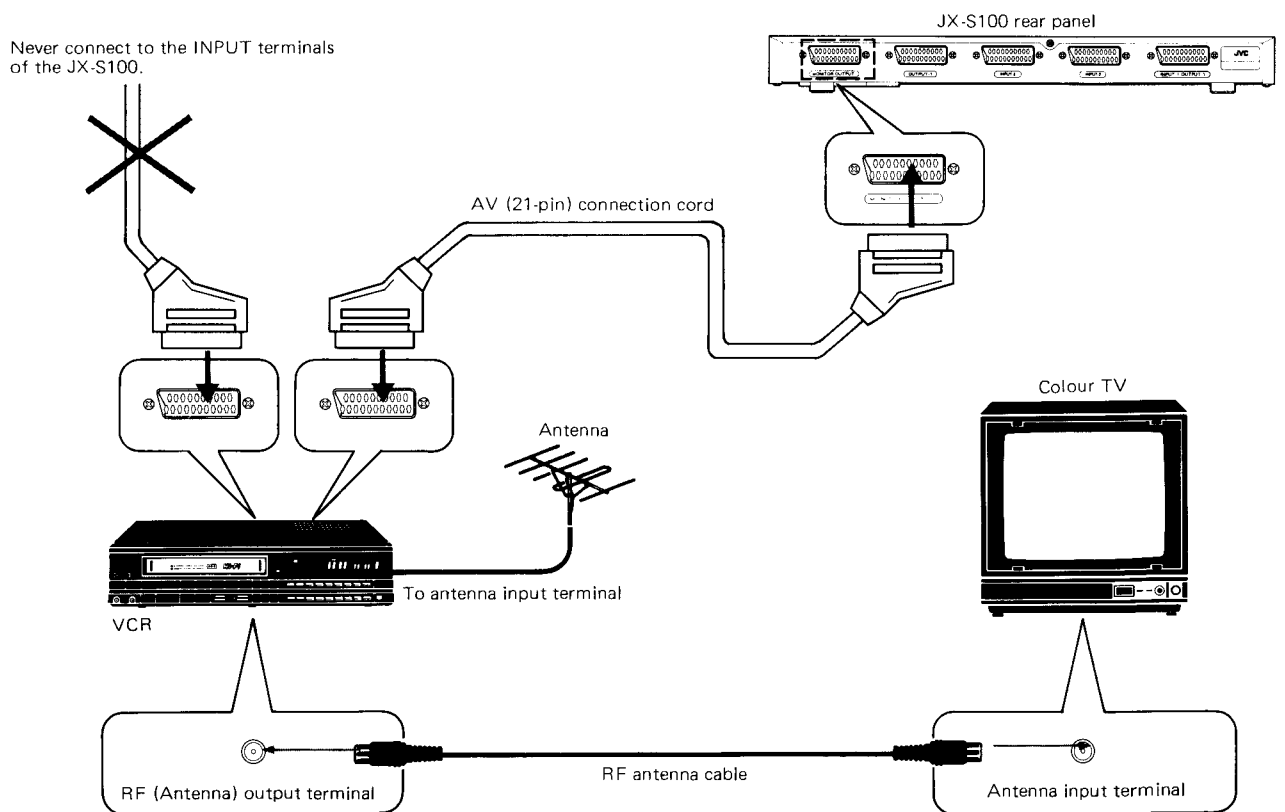


Connecting a TV with RF (Antenna) Input Only

•Connection of TV monitor without AV (21-pin) terminal:

With this connection, the video signal output from the MONITOR OUTPUT terminal of the JX-S100 passes through the VCR and is supplied to the monitor TV.

Before connecting, read the instruction book of the VCR carefully. Also read "Notes" on page 7 carefully.



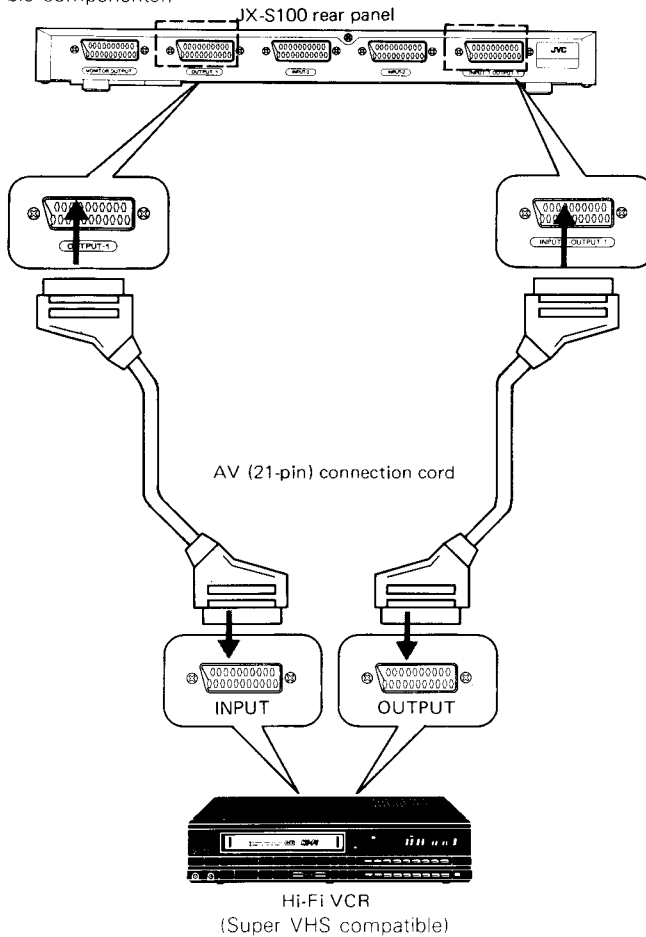
INPUT/OUTPUT Terminals

●Connections of VCR and other video equipment:

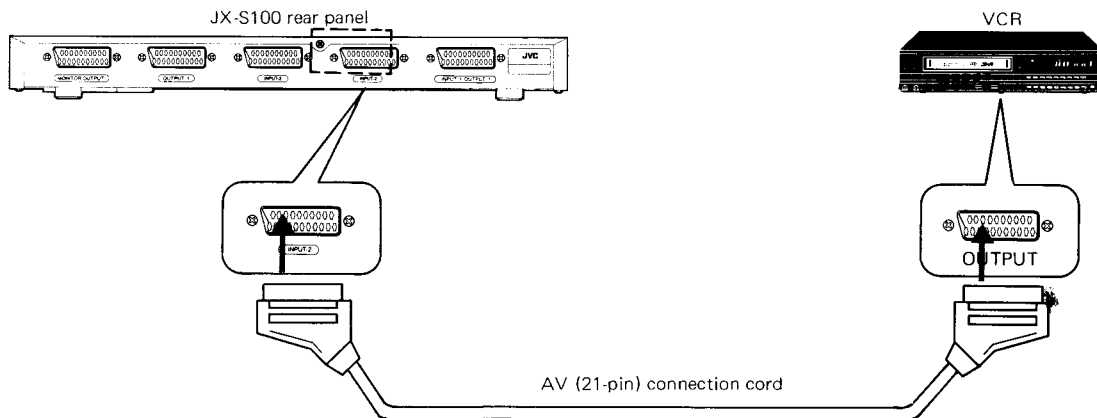
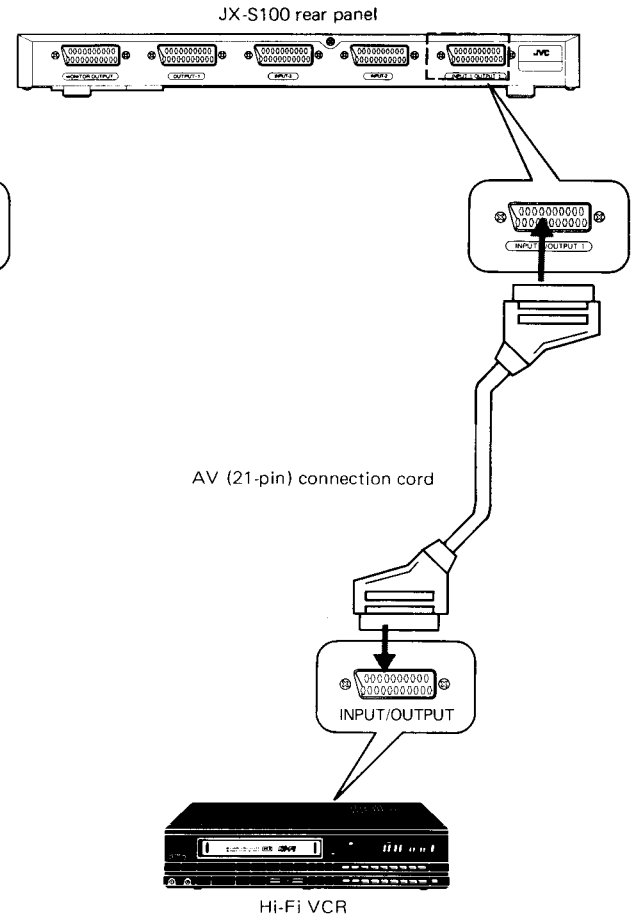
The JX-S100 is provided with 4 input terminals (Video, Audio R/L) and 2 output terminals (one included in INPUT-1).

■Connections of VCRs

- When two separate cables are used for connection of the INPUT-1/OUTPUT-1 terminal and OUTPUT-1 terminal of this unit to VCR. (Choose this connection for Super VHS compatible components.)

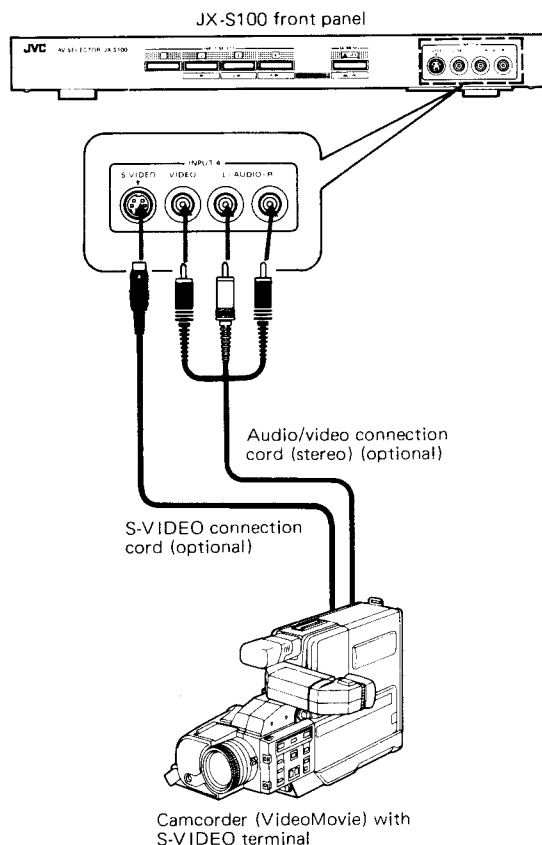


- When one cable is used for connection of the INPUT-1/OUTPUT-1 terminal of this unit to VCR.

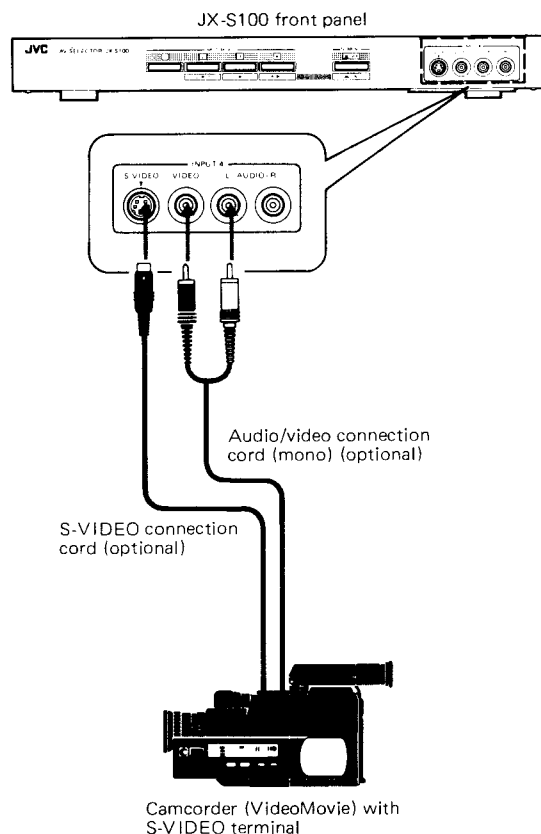


Connecting a camcorder (VideoMovie)

- Connecting a camcorder (VideoMovie) with stereo audio outputs:



- Connecting a camcorder (VideoMovie) with monaural audio output:

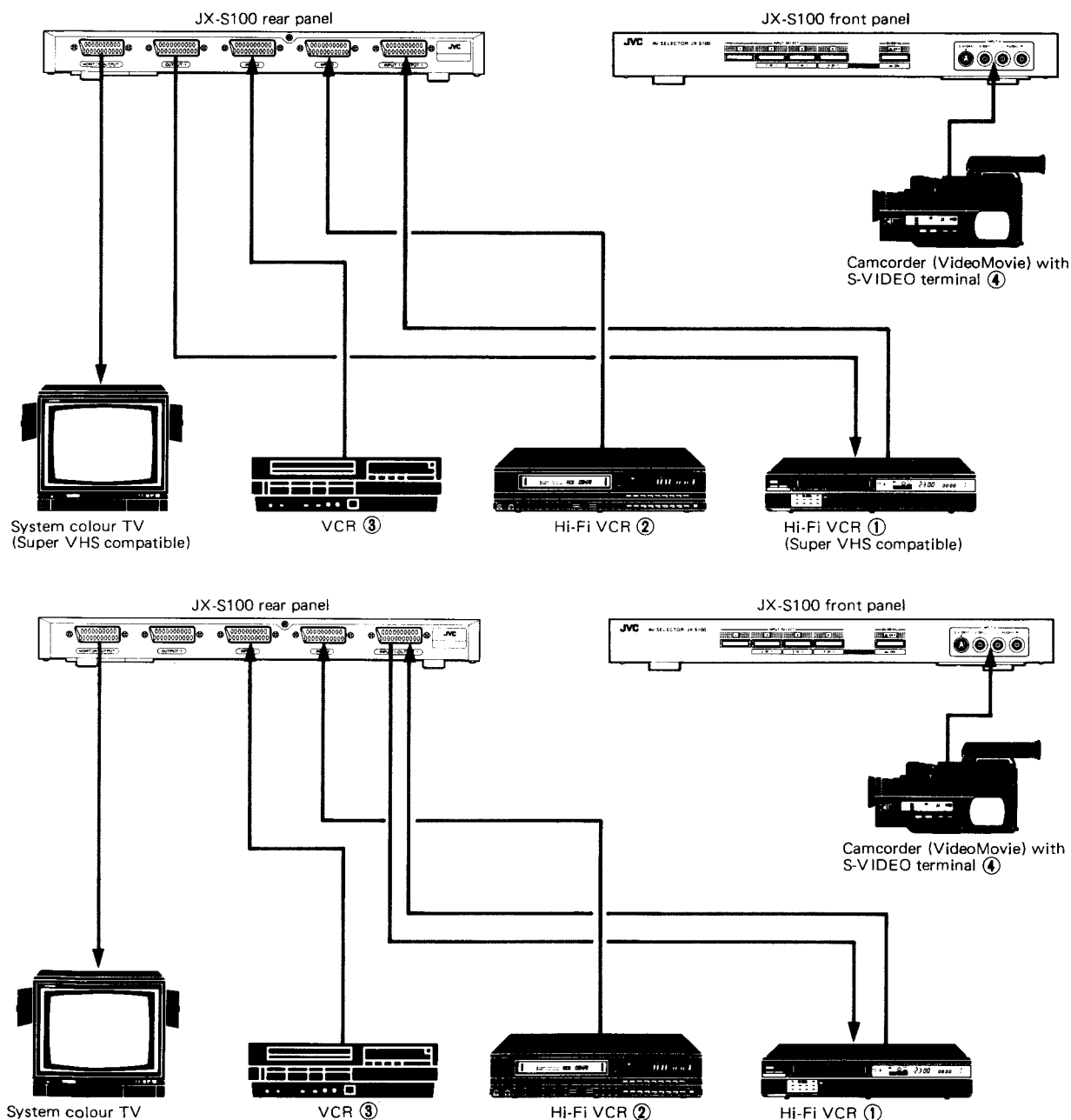


Notes:

- When dubbing or editing, set the input select switch on the recording VCR to the "AUX" input position.
- INPUT-1 through INPUT-3 of the JX-S100 have terminals compatible with the A/V control (Slow SW) function; when a VCR with the A/V control (Slow SW) function is connected, the video signal from this VCR will be selected regardless of the setting of the video input mode (TV, VIDEO-1 or VIDEO-2) of the monitor TV. When the picture from another input source is required to be viewed on the monitor TV, stop playing the VCR with the A/V control (Slow SW) function or switch it off.
- Since the INPUT-4 terminals of this unit do not include a terminal for the A/V control (Slow SW) function, when the video component connected to INPUT-4 is used, select the input source to be supplied to the monitor TV with the switches on the TV itself.
- Since the signal from the S-VIDEO terminal has priority among the INPUT-4 terminals (of JX-S100), when the signal from the VIDEO (composite) terminal is required, remove the S-VIDEO connection cord connected to the S-VIDEO terminal.
- In the AV (21-pin) connector used by the JX-S100 and other video components, since the same terminal is used for the video (composite) signal and for the S-VIDEO Y (luminance) signal, if S-VHS is selected as the video mode on the VCR used for playback, also set the video mode of the VCR used for recording to S-VHS.

EXAMPLES OF USE

The following diagram shows an example of connections. Be sure to read the instruction manuals of components to be connected carefully.



How to Watch a Video Program

●When viewing a video program played back on one of up to four video components, using a system colour TV.

Preparation 1:

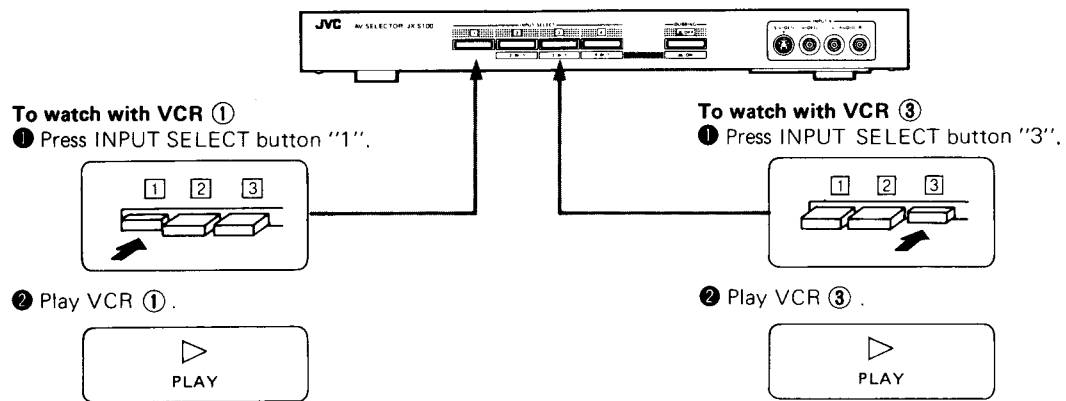
Connect the video components and system colour TV referring to the "Connections" on pages 4 – 7.

Preparation 2:

Switch ON the video equipment. Be sure to read the instructions manuals of each video component.

Preparation 3:

Set the input selector of the system colour TV to the position corresponding to the terminals to which the JX-S100 is connected. (When a VCR without an A/V control (Slow SW) function is used.)



To watch with VCR ② or ④

In the same way as for VCR ①, press INPUT SELECT button "2" or "4", and play VCR ② or ④.

Note:

- If two or more buttons are depressed simultaneously, all buttons depressed are engaged and two or more video signals will be mixed and output.

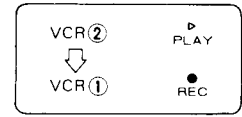
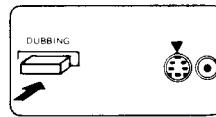
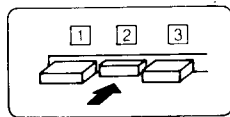
How to Perform Dubbing/Editing

Preparation:

Connect the video components referring to "How to watch a video program" on page 8, and switch ON all components.

To dub from VCR ② to VCR ①

- ① Press the INPUT SELECT button "2"
- ② Press the DUBBING button to ON.
- ③ Start VCR ② in the playback mode and VCR ① in the recording mode.



Notes:

- Be sure to connect the input/output terminals of VCR ① and the output terminals of VCR ② to the corresponding terminals of the JX-S100 correctly.
- During dubbing, do not press any of the INPUT SELECT buttons.
- When activating dubbing, be sure to set the input select switch on the VCR used for recording to the "AUX" position.
- Depending on the video equipment used, the volume level of the recorded sound may be slightly different from that of the original recording.

(Before starting recording an important program, it is recommended you first make a test recording to check that the operations have been performed correctly.)

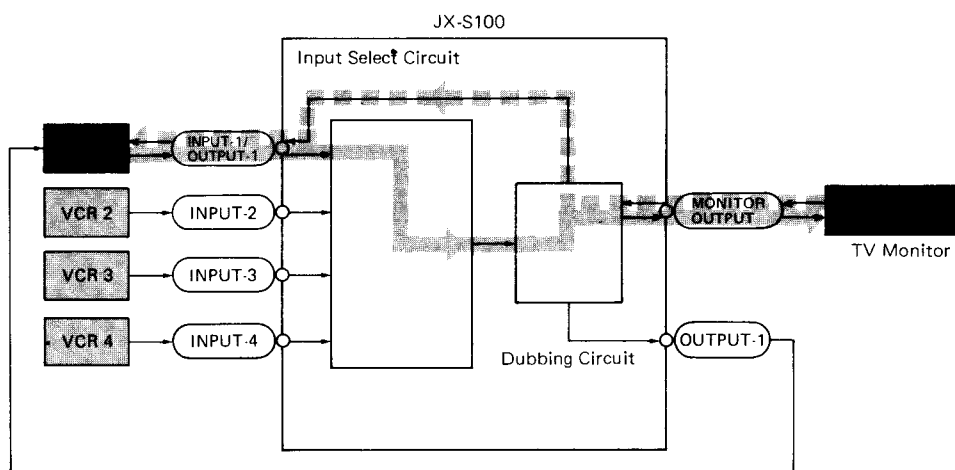
TROUBLESHOOTING

What appears to be a malfunction may not always be serious. Make sure first . . .

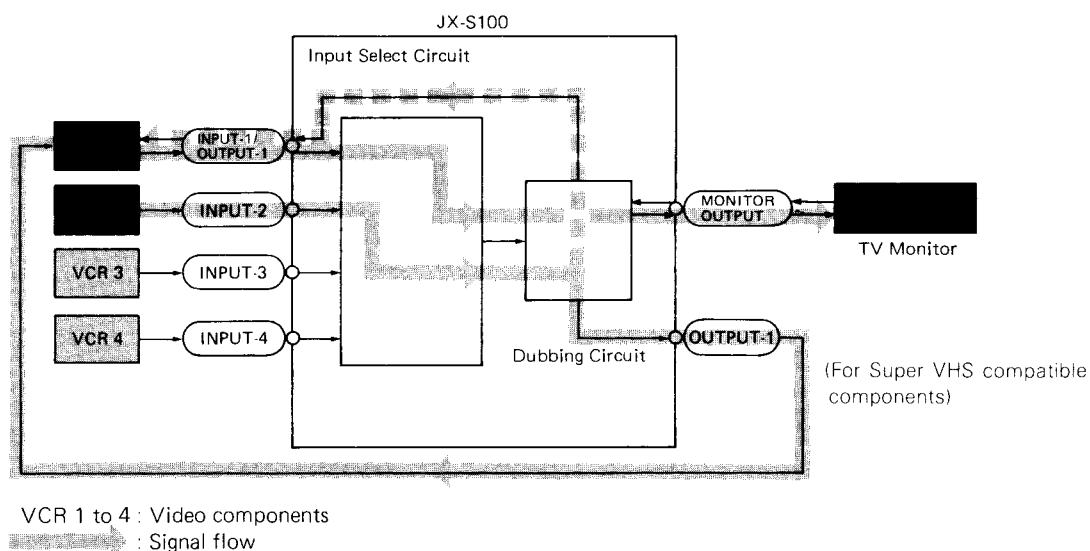
Symptom	Causes	Remedy, Check	Page (to be referred to)
Required picture does not appear.	● Is the video component connected correctly to the INPUT terminals, and is the corresponding INPUT SELECT button pressed? ● Is the monitor TV connected to the MONITOR OUTPUT terminal correctly?	● Connect again correctly, and press the corresponding INPUT SELECT button. ● Connect again correctly.	4 - 7 5
Picture or sound distorted.	● Are two or more INPUT SELECT buttons depressed?	● Press only the required button.	9
Picture and sound are not recorded on the dubbed tape.	● Are both the playback VCR and recording VCR connected to the INPUT/OUTPUT terminals correctly, and is the correct INPUT SELECT button depressed? ● Is the input select switch on the recording VCR set to the correct position?	● Connect again correctly, and press the corresponding INPUT SELECT button. ● Set the input select switch of the recording VCR to the "AUX" position.	6, 7 7, 9
No picture or sound output to the TV monitor during dubbing.	● Are the video components connected correctly to the INPUT/OUTPUT terminals of the JX-S100?	● Connect them again correctly.	6
TV broadcast program cannot be recorded.	● Is the input select switch of the recording VCR set to the correct position?	● Set the input select switch of the recording VCR to the "Tuner" position.	7, 9

BLOCK DIAGRAM

●Flow of signal from INPUT-1 with DUBBING button OFF:



●Flow of signal from INPUT-1 with DUBBING button ON:



SPECIFICATIONS

Inputs	: 4 lines (Super VHS compatible)
Output	: 2 lines (Super VHS compatible, 1 line is included in INPUT-1)
Monitor	: 1 line (Super VHS compatible)
Frequency Response	: 0 – 10 MHz (video), 0 – 100 kHz (audio)
Dimensions	: 435 (W) x 47 (H) x 165.5 (D) mm (including knobs and feet)
Weight	: 1.5 kg

Design and specifications subject to change without notice.

2. Specifications

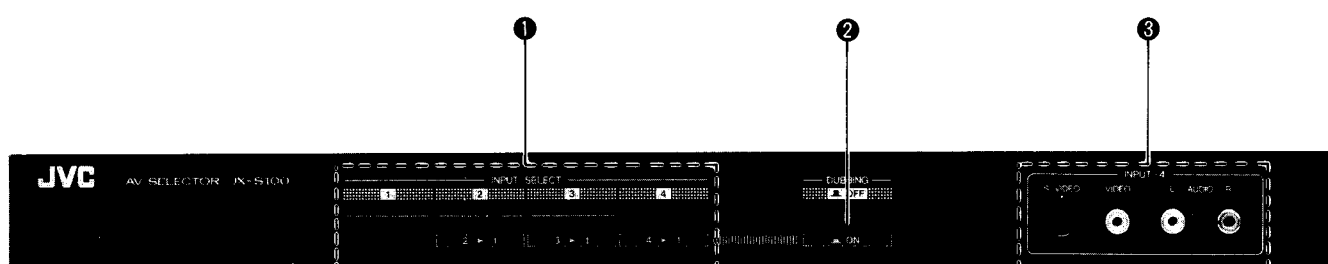
Inputs : 4 lines (Super VHS compatible)
 Output : 2 lines (Super VHS compatible,
 1 line is included in INPUT-1)
 Monitor : 1 line (Super VHS compatible)
 Frequency Response : 0 ~ 10 MHz (Video)
 0 ~ 100 kHz (Audio)

Dimensions : 435(W) × 47(H) × 165.5(D) mm
 (including Knobs and feet)
 Weight : 1.5kg

Design and specifications subject to change without notice.

3. Names of Parts and Their Functions

Front Panel



① INPUT SELECT buttons

Select the required input source with these buttons.

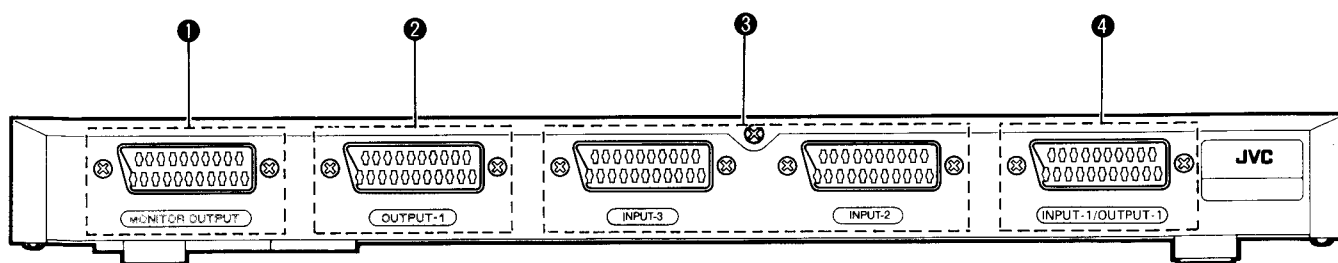
② DUBBING button

Press this button to engage the dubbing/editing mode.
 The signal flow in the dubbing mode is indicated beneath each input selector button.

③ INPUT-4 terminals

Connect the output terminals of a video/audio component to these terminals; convenient for temporary hook-up of camcorder or portable VCR.

Rear Panel



① MONITOR OUTPUT terminal

Connect the input terminals of the monitor TV to this terminal.

② OUTPUT-1 terminal

Connect the input terminals of the video/audio components to this terminal.

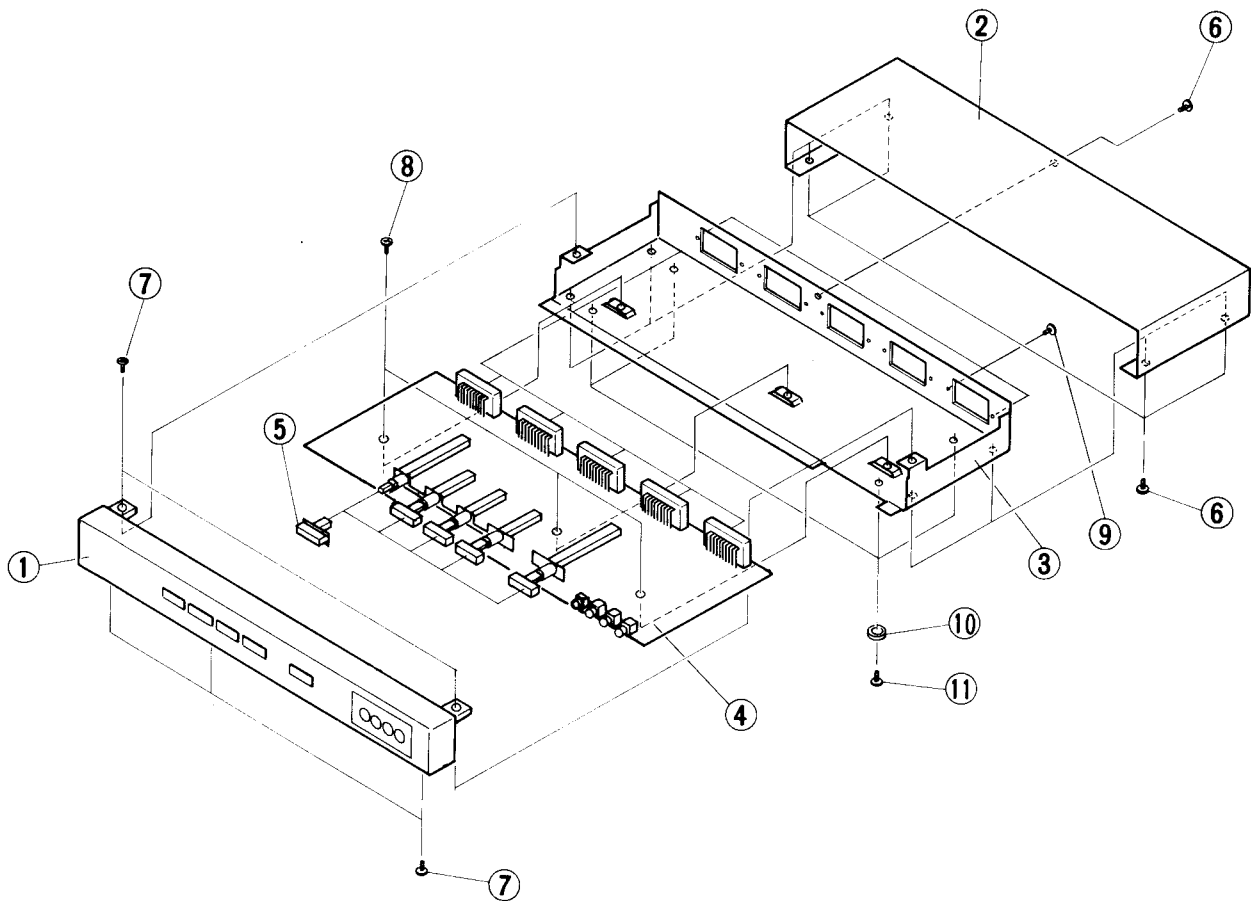
③ INPUT-2/-3 terminals

Connect the output terminals of the video/audio components to these terminals.

④ INPUT-1/OUTPUT-1 terminal

Connect the input/output terminals of video/audio components to this terminal.

4. Disassembly



■ Removing the Top Cover ②

1. Remove the five screws ⑥ retaining the top cover ②.
2. Remove the top cover ② by lifting it gently toward the rear.

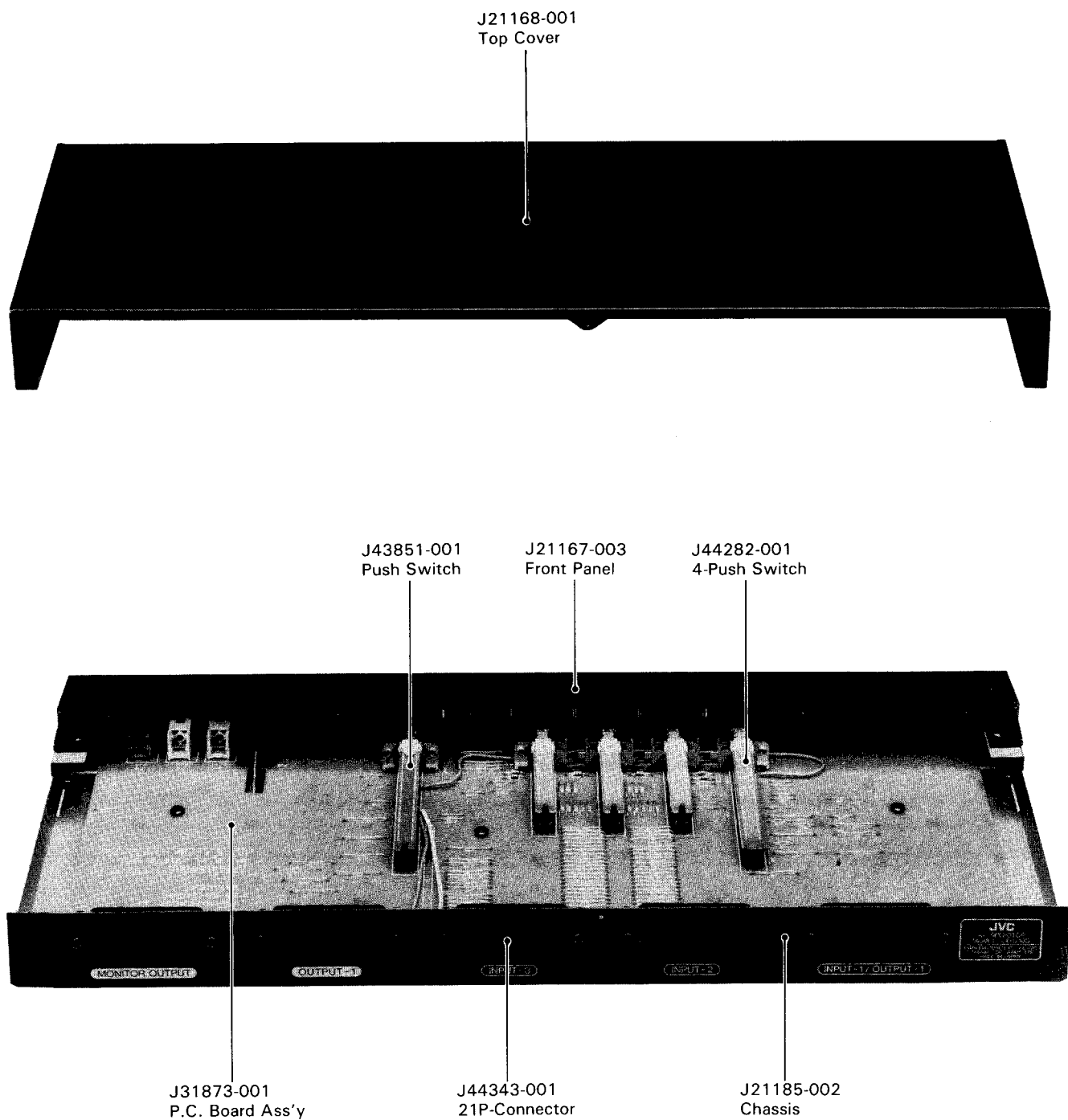
■ Removing the Front Panel ①

1. After removing the top cover ②, remove the five screws ⑦ fixing the front panel ① to the chassis ③.
2. Remove the front panel ① gently toward the front.

■ Removing the PC Board Ass'y ④

1. After removing the top cover ② and the front panel ①, remove the three screws ⑧ retaining the PC Board ass'y ④.
2. Remove the 10 screws ⑨ fixing the jacks on the PC Board ass'y ④ to the chassis ③.

5. Main Parts Locations



6. Operations

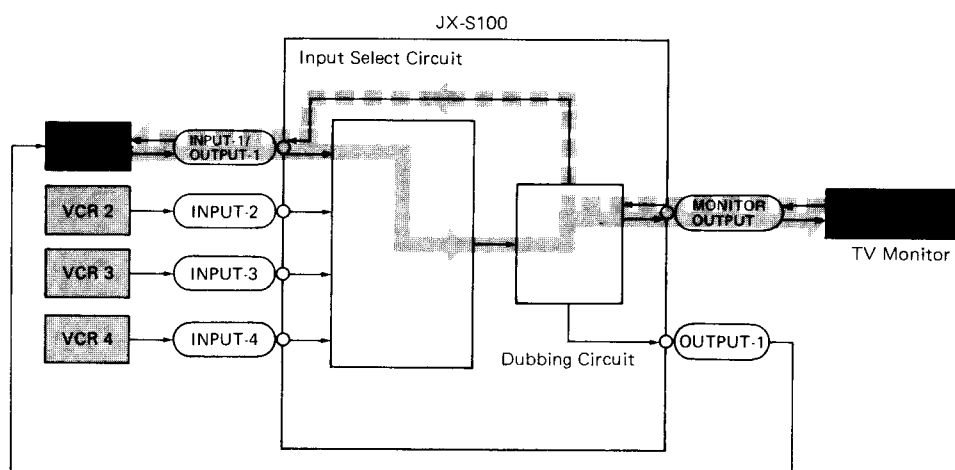
Input Select and Signal Output

Signal Output Input Select	DUBBING switch OFF	DUBBING switch ON	
		S-VIDEO signal	VIDEO signal
1	MONITOR OUTPUT	MONITOR OUTPUT	MONITOR OUTPUT
2	MONITOR OUTPUT	OUTPUT-1	OUTPUT-1 and INPUT-1/OUTPUT-1
3	MONITOR OUTPUT	OUTPUT-1	OUTPUT-1 and INPUT-1/OUTPUT-1
4	MONITOR OUTPUT	OUTPUT-1	OUTPUT-1 and INPUT-1/OUTPUT-1

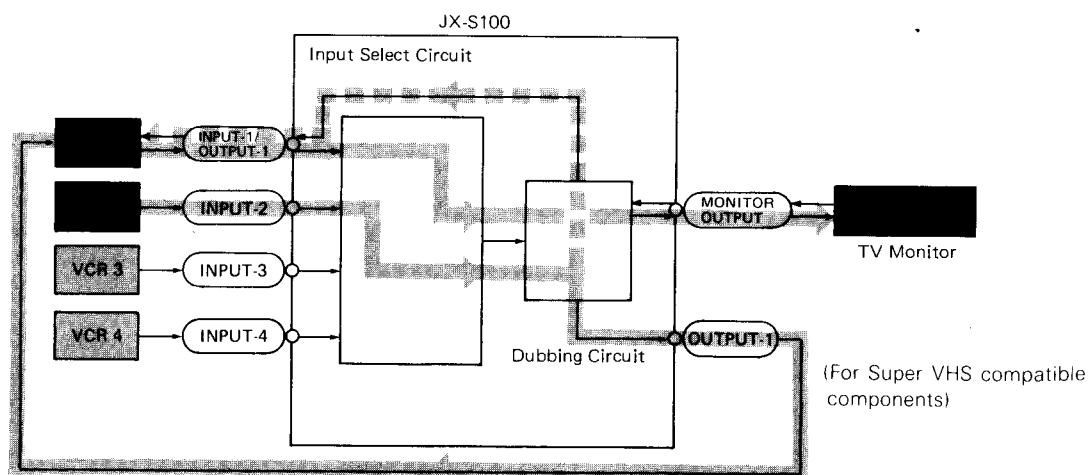
- The S-VIDEO terminal has priority over the VIDEO terminal among the INPUT-4 terminals.

7. Block Diagram

Flow of Signal from INPUT-1 with DUBBING button OFF

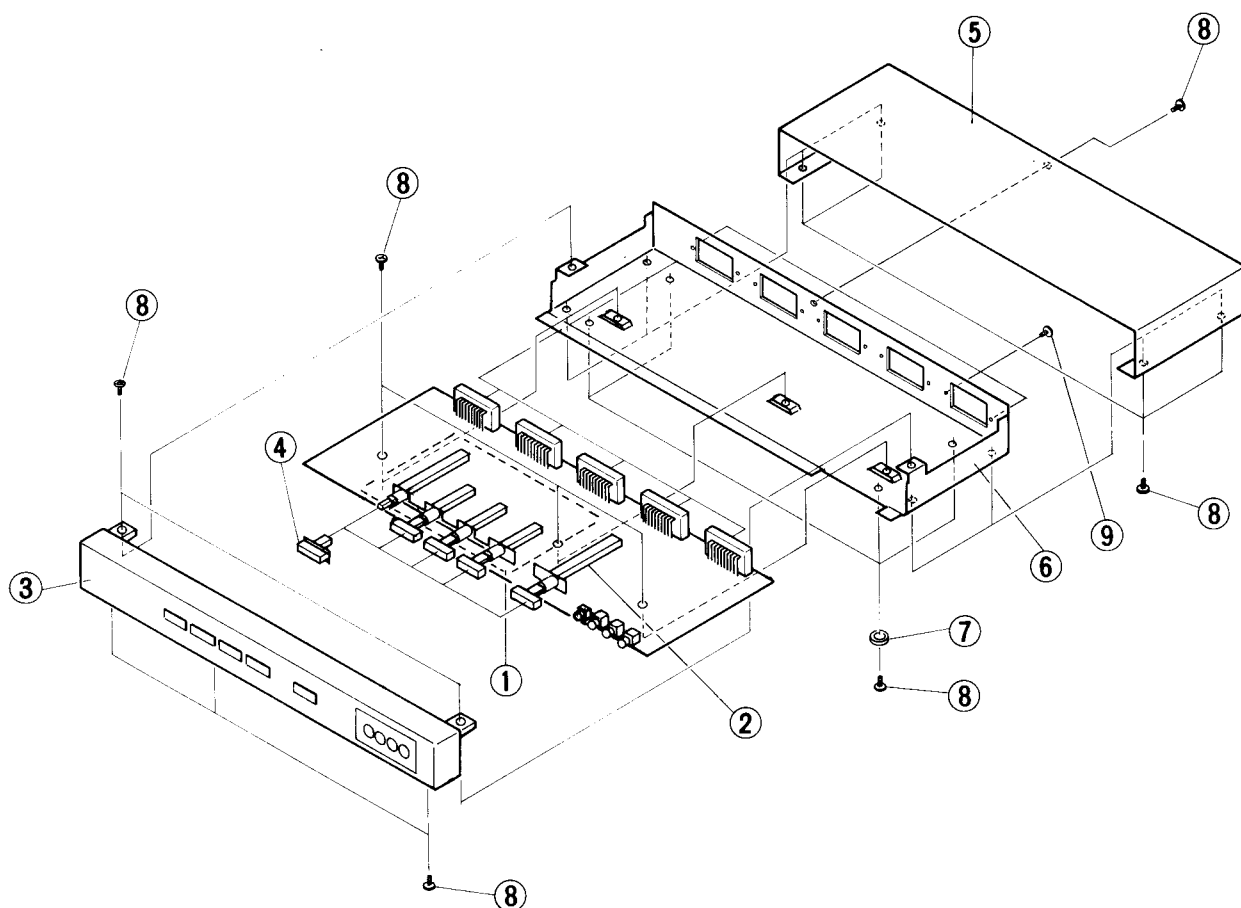


Flow of Signal from INPUT-2 with DUBBING button ON



VCR 1 to 4 : Video components
 : Signal flow

8. Exploded View

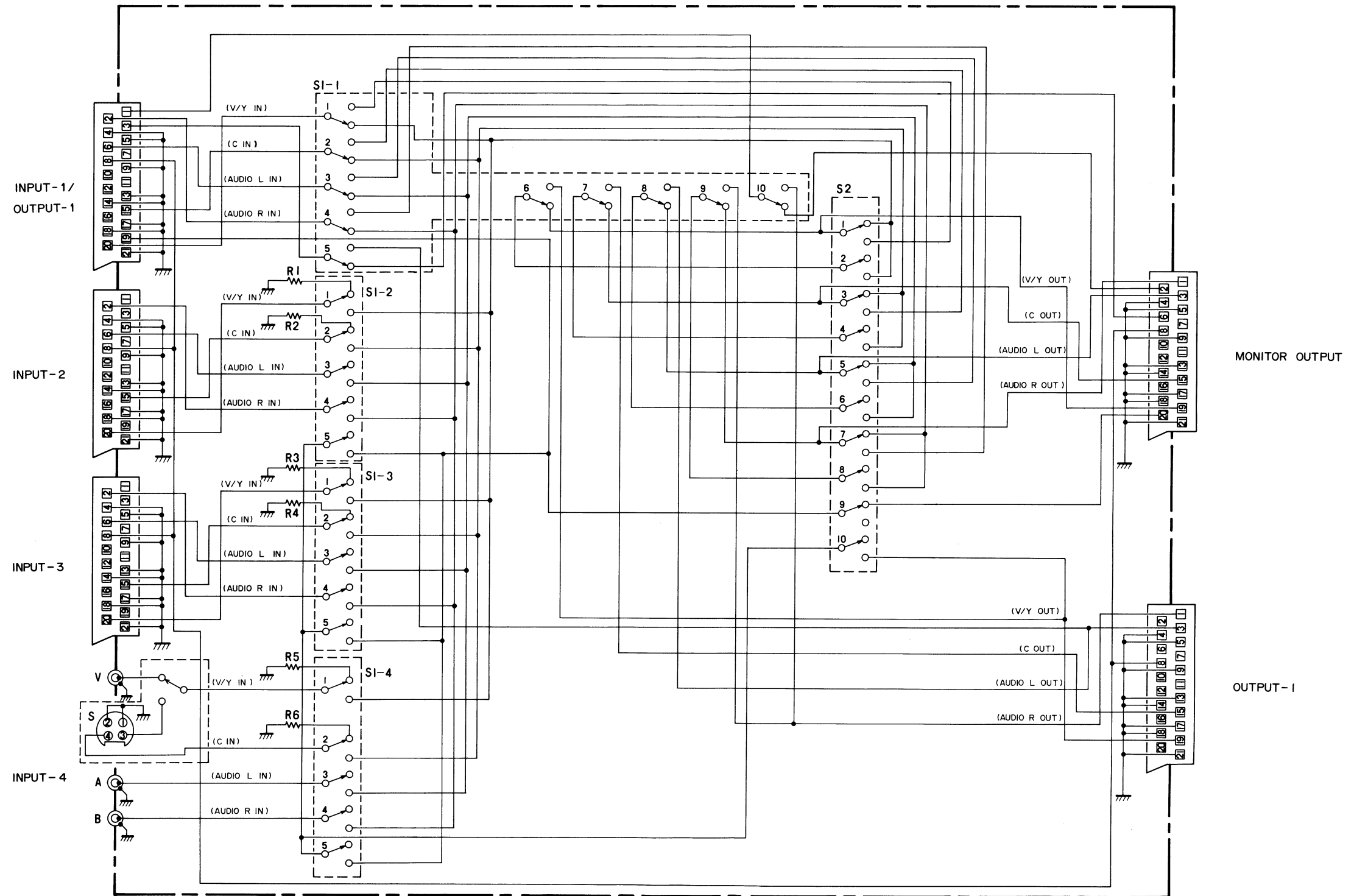


9. Parts List

Electric Parts List

Item No.	Symbol No.	part Number	Part Name	Q'ty	Remarks
1	R1 — 6	QRD161J-750	Carbon Resistor	6	75 Ω 1/6 W
2	S1	J44282-001	4-Push Switch	1	
	S2	J43851-001	Push Switch	1	
	PJ6	J44344-001	S-Jack	1	Gold-Plated
	PJ7	J43678-001	1P-Jack	1	Yellow, Gold-Plated
	PJ8	J43679-001	1P-Jack	1	White, Gold-Plated
	PJ9	J43680-001	1P-Jack	1	Red, Gold-Plated
	PJ1 ~ 5	J44343-001	21P-Connector	5	
		J31872-001	P.C. Board	1	Parts will not be supplied as assemblies.
		J31873-001	P.C. Board Ass'y	1	

12. Schematic Diagram

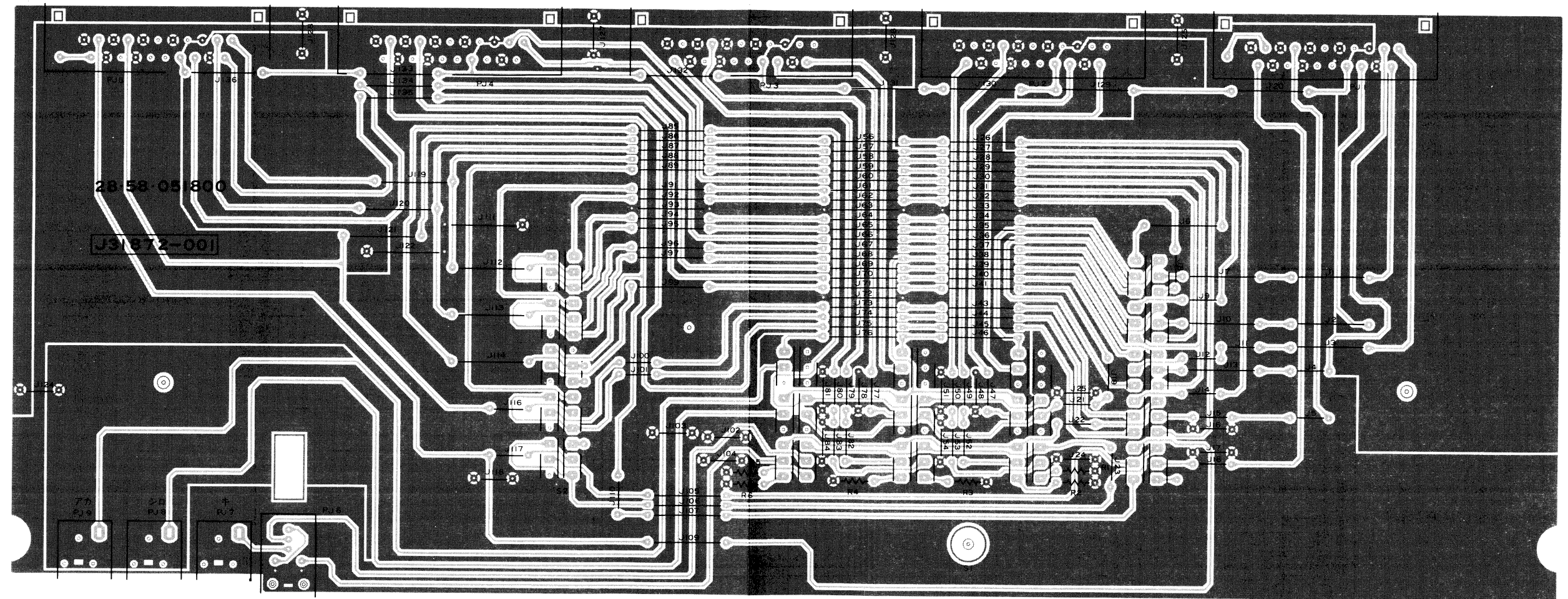


S1 : Input Select Switch
S2 : Dubbing Switch

This is a standard circuit diagram.
Design and contents are subject to change without notice.

13. Printed Circuit Board

Reduction ratio : 83 %

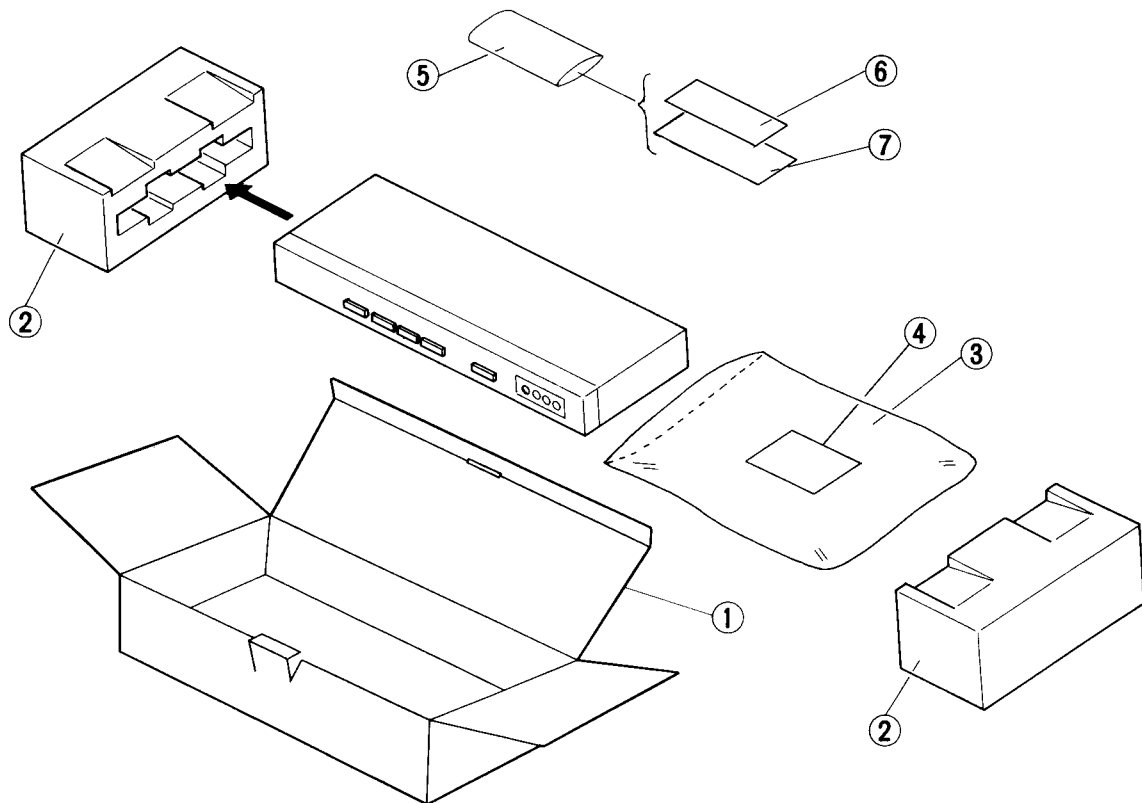


↓
FRONT

■ shows ground.
▨ other voltages.

Mechanical Parts List

Item No.	Part Number	Part Name	Q'ty	Remarks
3	J21167-003	Front Panel	1	
4	J31497-002	Switch Knob	5	
5	J21168-001	Top Cover	1	
6	J21185-002	Chassis	1	
7	EG210377-001	Foot	4	
8	SDSG3006M	Tapping Screw	17	
9	SPSF3008M	Tapping Screw	10	

10. Packing Materials and Parts Numbers

Item No.	Part Number	Part Name	Q'ty	Remarks
1	J11073-003	Packing Case	1	for Main Unit Attached to the envelope
2	J21170-001	Packing Pad	2	
3	J31498-001	Envelope	1	
4	E70505-001	Caution Label	1	

11. Accessories List

Item No.	Part Number	Part Name	Q'ty	Remarks
5	QPGA020-03005	Envelope	1	for Printed Materials
6	BT20066A	EEC Agency	1	
7	J5500-039B	Instruction Book	1	

JX-S100(EB)

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO ACCESSORY DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN